

**CLAIMS**

What is claimed is:

1. A method, comprising:
  - (a) at a receiving node of a communication network, receiving a request to schedule at  
5 least one timeslot of a recurrent cycle for receipt of burst transmissions from a  
sending node of the network;
  - (b) in response to the scheduling request, selecting at least one timeslot of the cycle in  
a manner which is independent of timeslot selections made by other nodes of the  
network for receipt of burst transmissions; and
  - 10 (c) communicating the selected timeslot or timeslots to the sending node.
2. The method of claim 1, further comprising:  
at the sending node, determining at least one time within the recurrent cycle at  
which bursts need to depart in order to arrive at the receiving node within a selected  
15 timeslot; and  
in at least one instance of the recurrent cycle, transmitting a burst at least at  
one of the times that have been determined.
3. The method of claim 1, further comprising:  
20 detecting non-receipt of a scheduled burst at the receiving node;  
selecting a timeslot in substitution for the timeslot of the non-received burst;  
and  
communicating the selected substitute timeslot to the sending node.
- 25 4. The method of claim 3, wherein the selection of a substitute timeslot  
comprises choosing between two alternatives, which are: selecting a timeslot that is  
still unscheduled, and selecting a timeslot that has already been scheduled.
5. The method of claim 1, wherein:  
30 said receiving node is one of at least a first and a second receiving node;  
the first and second receiving nodes each select at least one timeslot in which  
bursts are to be received; and the method further comprises, at the sending node:

determining a departure time within the recurrent cycle for bursts which are to be received at the first receiving node in the timeslot which it has selected;

assigning said departure time to at least one burst destined for the first receiving node;

5        determining a departure time within the recurrent cycle for bursts which are to be received at the second receiving node in the timeslot which it has selected;

detecting at least one instance of conflict in which the departure time of bursts destined for the first receiving node overlaps the departure time of bursts destined for the second receiving node; and

10        reassigning the assigned departure time to at least one burst destined for the second receiving node, such that said departure time is no longer available to bursts destined for the first receiving node.

6. The method of claim 5, wherein the reassigning step is conditional on the  
15        outcome of step of deciding whether or not to reassign.